

ABSTRACT OF THE DISCLOSURE

The present invention relates to a manufacturing method and a structure of organic
5 light-emitting diode display panels. By precisely controlling the position, shape and
thickness of the organic light-emitting layer of pixels, the conventional cross talk problem
can be solved and a better quality and longer lifetime for the OLED can be obtained. This
method is to form a plurality of long grooves on a substrate, then fill the grooves with a
conducting material to form a plurality of first electrode lines. A cavity matrix is formed on
10 the first electrodes. Each individual cavity of the cavity matrix corresponds to a pixel. An
organic light-emitting layer is filled in the cavities. Repeat the above steps three times, and a
red-green-blue three-color organic light-emitting matrix can be obtained. A plurality of
second electrode lines are formed on the organic light-emitting layer. The second electrode
lines are horizontally parallel for connecting the organic light-emitting layer with the same
15 horizontal position. Hence, a full-color organic light-emitting diode display panel can be
obtained.